

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/693,749	KURIEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	CANH LE	2439	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/17/2009.
2. ☒ The allowed claim(s) is/are 1-25 and 35.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  
\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                                 |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|  | 9. <input type="checkbox"/> Other _____.  |

/Canh Le/  
Examiner, Art Unit 2439



### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Peter Trahms-Neudorfer on Wednesday February 3, 2010.

The newly amended set of claims as authorized by Applicant immediately follow:

**1. (Currently Amended)** A system that manages the partitioning of an application comprising:

at least one processor and at least one memory in communication with said at least one processor, said processor configured to execute program instructions that comprise the following:

a base component stored in said at least one memory that hosts an operation of a first environment and a second environment, the application comprising:

a first software object of said application that executes in said first environment comprising a first operating system, wherein said first software object provides a subset of the operations of the application; said first software object handling a plurality of data and including logic to identify a first of said plurality of data as not processable by said first software object, said first software object sending said first of said plurality of data to said base component, said first software object receiving processed data corresponding to said first of said plurality of data

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from said base component, said first software object using said processed data to further process the plurality of data; and

a second software object of said application that executes in said second environment comprising a second operating system, said second software object receiving said first of said plurality of data from said base component with a corresponding wrapper, said second software object verifying said first of said plurality of data as being unmodified by comparing said data to the corresponding wrapper, said second software object processing said first of said plurality of data in a manner that resists tampering with said first of said plurality of data, said second software object sending said processed data to said base component;

said base component comprising or hosting logic that receives said first of said plurality of data from said first software object, applies the corresponding wrapper to said first of said plurality of data, said corresponding wrapper comprising an indication **of said second environment** of said second software object and a seal that may be checked against said first of said plurality of data to determine whether said first of said plurality of data has been altered since the seal was determined, and routes said first of said plurality of data to said second environment, such that functionality of said application is parsed between said first and second operating systems;

said base component further comprising or hosting logic that receives said processed data from said second software object, applies a second wrapper to said processed data, said second wrapper comprising an indication **of said first environment** of said first software object and a second seal that may be checked against said processed data to determine whether said processed data has been altered since the second seal was determined, and routes said processed data to

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said first environment, such that functionality of said application is parsed between said first and second operating systems.

**4. (Currently Amended)** The system of claim 1, and wherein ~~the~~ a resistance to tampering provided by said second software object comprises said second environment resisting interference with a display of said first of said plurality of data by writing a representation of said first of said plurality of data into a video memory associated with a display device so as to cause said representation to supersede any image at a location on said display device at which said representation is to be displayed.

**13. (Currently Amended)** A method of a first software object of an application, which executes in a first environment comprising a first operating system executing on a computer, handling data to which an assurance policy that corresponds to a level of assurance that the application will perform its expected functions correctly applies, the method comprising:

determining, by the first software object executing on the computer, that the data should be processed securely;

sending, by the first software object, the data to a base environment with an indication to process the data securely;

determining, by the base environment, a second software object with which to process the data securely, the second software object corresponding to the first software object;

applying, by the base environment, a wrapper to the data, the wrapper identifying a second software environment of the second software object, the wrapper comprising a seal that

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may be checked against the data to determine whether the data has been altered since the seal was determined;

sending, by the base environment, the data and the corresponding wrapper to the second software environment;

creating, by the second software environment, a resistance to tampering comprising determining that the data has not been modified using the data and the corresponding seal;

processing, by the second software environment, the data;

sending, by the second software environment, a result of the processed data to the base environment with an indication to return the data to a software environment that originally sent the data;

determining, by the base environment, that the first software environment is the software environment that originally sent the result;

applying, by the base environment, a second wrapper to the result, the second wrapper identifying the first software environment, the second wrapper comprising a second seal that may be checked against the result to determine whether the result has been altered since the second seal was determined;

sending, by the base environment, the result and the second wrapper to the first software environment; and

verifying, by the first software environment, that the result has not been modified

### **DETAILED ACTION**

This Office Action is in response to the application filed on 11/17/2009.

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Claims 26-34 have been cancelled.

Claims 1-25 and 35 have been pending.

***Reasons for Allowance***

Claims 1-25 and 35 are allowed.

The following is an examiner's statement for reasons for allowance:

The prior art of record, either singularly or in combination, failed to teach the combination of the invention as claimed in independent claims 1, 13 and 25. For example, it failed to teach

“said base component comprising or hosting logic that receives said first of said plurality of data from said first software object, applies the corresponding wrapper to said first of said plurality of data, said corresponding wrapper comprising an indication of said second environment of said second software object and a seal that may be checked against said first of said plurality of data to determine whether said first of said plurality of data has been altered since the seal was determined, and routes said first of said plurality of data to said second environment, such that functionality of said application is parsed between said first and second operating systems; said base component further comprising or hosting logic that receives said processed data from said second software object, applies a second wrapper to said processed data, said second wrapper comprising an indication of said first environment of said first software object and a second seal that may be checked against said processed data to determine whether said processed data has been altered since the second seal was determined, and routes said processed data to said first environment, such that functionality of said application is parsed

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between said first and second operating systems.” This feature in light of other feature describes in the independent claims 1, 13, and 25 enable claims’ allowable.

Claims 2-12 depend on claim 1, and are therefore considered as allowable claims.

Claims 14-24 and 35 depend on claim 13, and are therefore considered as allowable claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Canh Le whose telephone number is 571-270-1380. The examiner can normally be reached on Monday to Friday 7:30AM to 5:00PM other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Orgad Edan can be reached on 571-272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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/Canh Le/

Examiner, Art Unit 2139

February 3, 2010

/Edan Orgad/

Supervisory Patent Examiner, Art Unit 2439